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1982

Shipments of HOT DIP AFTER FABRICATION GALVANIZED STEEL by End-Use Industries

TABLE 1

SHIPMENTS OF HOT DIP AFTER FABRICATION GALVANIZED STEEL BY END-USE INDUSTRIES FOR 1982 (Short Tons)

END-USE INDUSTRIES		SHIPMENTS (TONS)	CATEGORY TOTALS (TONS)
AGRICULTURE	Farm, Garden, Irrigation, Machinery & Equipment		80,966
ELECTRIC UTILITIES	Electric Transmission, Distribution & Generating	86,481	
	Noncurrent Carrying Wire Devices	14,001	
	Misc.-Rebar, Expanded Lath	1,064	101,546
FABRICATED WIRE PRODUCTS			77,468
HEAVY CONSTRUCTION (Excluding Highway)	Petrochemical (including refineries)	42,906	
	Pulp & Paper Mills	4,729	
	Water & Waste Treatment	3,843	
	Other Heavy Construction Projects	20,654	
	Misc.-Rebar, Expanded Lath	2,374	74,506
LIGHT CONSTRUCTION	Non-Residential Buildings	69,092	
	Residential Buildings	1,738	
	Communication Systems: Hardware-Telephone, Pole, Vault	14,413	
	Material From Small Steel Centers	3,413	
	Misc.-Rebar, Expanded Lath	10,835	99,491
RECREATION	Sporting & Athletic Goods		7,109
TRANSPORTATION	Highway, Street and Airport Construction	95,438	
	Bridges (highway and rail)	7,623	
	Marine	3,051	
	Railroad & Rapid Transit	1,630	
	Automotive	762	
	Misc.-Rebar, Expanded Lath	295	108,799
OTHER (Not Reported Elsewhere By Market Category)	Containers	4,602	
	Fasteners	5,443	
	Forgings & Castings	1,784	
	Outdoor Advertising	711	12,540
OTHER UNIDENTIFIED			7,827
	GRAND TOTAL		570,252

This study, undertaken by Zinc Institute analyzes the hot dip after fabrication galvanizing market by end-use industries. The statistics have been provided by 44 United States and Canadian galvanizers, with both captive and job operations included. This year showed a drastic and regrettable decrease in respondents over the 1981 survey. The continuing depressed state of the economy was stated as a major factor for the low response. Last year, there were 99 responses. This analysis would be much more useful to the galvanizers if more of them returned completed questionaires. Anonymity of responses is guaranteed, and the results of the survey yield considerable market insight to participants.

Shipments of hot dip after fabrication galvanized steel, as reported by these 44 galvanizers, amounted to 570,252 short tons in 1982. The decrease from 1981 was partly accounted for by the drop in respondents. Table 1 shows the results of the 1982 survey. It should be noted that the end-use survey results are given in tons of steel galvanized. Using a factor of 7% to 8% for the weight of the zinc coating, it can be determined that the 570,252 short tons of steel galvanized consumed between 40,000 and 45,620 short tons of slab zinc.

Table 2 gives a profile of galvanizers who completed this survey in 1980, 1981 and 1982 in terms of the size of their operations.

TABLE 2

Tons of Steel Galvanized Per Year	Number of Galvanizers 1980	1981	1982
1 to 5,000	42	43	22
5,000 to 10,000	19	18	3
10,000 to 20,000	21	13	1
20,000 to 30,000	5	4	1
30,000 and over	12	16	6
Total	99	94	44

As table 2 shows, the number of small galvanizers who process under 5,000 tons of steel annually has remained proportionately steady, but the response rate from those galvanizers who process more than 5,000 tons was much smaller than the previous two years. This would make year-to-year comparison more difficult to interpret.

Table 3 shows a three year comparison, 1980-82, of tons and % market share by end-use industries, ranked by 1982 performance.

As table 3 indicates, the transportation market ranked first at 19% with 108,799 tons of steel galvanized in 1982. This market includes all components used to construct streets, highways, airport facilities, bridges, tunnels, ships, subways, railroads, automobiles, trucks and buses. Increased emphasis on corrosion resistance for transportation equipment has given this market a bright outlook. This is reflected in the 1982 tonnage which showed a much smaller relative decrease than the other industry segments.

TABLE 3
SHIPMENTS, BY END-USE INDUSTRIES

	1980		1981		1982	
	000 Tons	%	000 Tons	%	000 Tons	%
Transportation	154	11	146	12	109	19
Electric Utilities	289	21	325	27	102	18
Light Construction	225	16	91	7	99	17
Agricultural	95	7	99	8	81	15
Fabricated Wire Products	285	21	234	19	77	14
Heavy Construction	184	13	172	14	75	13
Other Markets	76	6	66	6	13	2
Recreation	13	1	5	1	7	1
Unidentified	62	4	70	6	7	1
Total	1,383	100%	1,208	100%	570	100%
No. of Respondents	99		94		44	

Electric utilities ranked second in the 1982 survey (was first in 1981 and 1980) with 101,546 short tons or 18% of the market. The largest portion of this market goes into electric transmission, generating equipment, electric light and power plants, substations and similar equipment.

Light construction was ranked third, representing 17% of the marketplace at 99,491 short tons. Light construction includes both commercial and residential building components for plants, warehouses, factories, hospitals, jails and public building as well as single family homes, condominiums, mobile homes, hotels, motels and dormitories. This category also includes communications systems and material from small steel centers. This market performed exceptionally well in 1982, especially in the second half of the year as interest rates started to decline. The U.S. housing market had declined precipitously in 1981 with only one million housing starts or one half of 1978. Its decline continued into 1982 but revived in the latter part of the year, with declining interest rates. It exploded in the first quarter of 1983 with housing rebounding to 1.7 million starts. Investors in light construction projects had postponed building, waiting for more favorable economic conditions. While the short term outlook depends on the course of interest rates, a strong base of pent-up demand exists in this market projecting a strong upsurge if the recovery continues and "reasonable" interest rates prevail.

Agricultural equipment comprised the fourth largest market at 15% or 80,966 short tons in 1982 remaining relatively stable with 1981 figures. The farm market has been plagued with low commodity prices and high interest rates for capital investment over the last few years. Little expansion is seen here until the markets improve. This market consists of components, implements and machinery such as irrigation equipment, barns, milking parlors, chicken brooders, conveyors, cleaning and sorting machines, tractors, incubators, mowers, windmills, silos, land rollers and water troughs.

Fabricated wire products comprise the next largest hot dip after fab market at 77,468 short tons or 14%. The largest portion of this market goes into chain link fence and the associated gates, posts and fittings as well as wire cloth and fabric. The poor showing in this market is directly related to the depressed state of the economy in 1982.

Heavy construction had an end-use market share of 13% or 74,506 short tons. This market galvanizes components for petro-chemical plants, paper and pulp mills, waste and waste treatment plants, heat exchangers, and other heavy construction projects. Again the state of the economy in 1982 was the chief reason for the relatively poor performance in this market.

2% of the market at 12,540 short tons goes to other markets which include containers, fasteners, forgings, castings and outdoor advertising.

Recreation, the smallest market, remained stable at about 1% or 7,109 short tons. Recreation includes components used in sporting and athletic goods and equipment such as playground equipment, bleachers, stadiums, boat piers and trailers.

Unidentified markets comprised 1% of the total at 7,827 short tons.

In order to obtain further insight into the findings of the 1982 survey, an attempt was made (Table 4) to provide some measure of continuity by tracking the performance of a "control" group of companies that responded to the survey for the last three years. This was done because it was felt that the poor response to this year's survey, particularly from the large galvanizers, could have biased the results of this survey.

As table 4 indicates, total shipments of this control group dropped 28% in 1982 which reflects the depressed state of the industry and general economic activity last year. Further, the ranking of the 1982 end-

use breakdown did not change from 1982 and 1981, as the three largest markets accounted for over 90% of their total shipments. Fabricated wire products consistently showed the highest tonnage with electrical utilities and heavy construction trading second and third place over the three-year period.

The results of this control group analysis appear to suggest that any discrepancies in the overall end-use breakdown might be more due to lack of continued participation in the survey by key large galvanizers than to a permanent shifting of end-use market shares.

TABLE 4
SHIPMENTS, BY END-USE INDUSTRIES
CONTROL GROUP

	1980		1981		1982	
	Tons	**%**	**Tons**	**%**	**Tons**	**%**
Agricultural	2,467	2.4	873	0.9	339	0.4
Electric Utilities	35,474	34.5	21,365	20.6	19,863	27.5
Fabricated Wire Products	46,480	45.2	48,360	46.5	23,438	32.4
Heavy Construction	13,471	13.1	30,494	29.4	16,389	22.7
Light Construction	645	0.6	905	0.9	7,570	10.5
Recreation	20	0.0	60	0.0	50	0.0
Transportation	3,260	3.2	726	0.7	2,853	3.9
Other	1,102	1.0	1,076	1.0	1,847	2.6
Total	102,919	100%	103,859	100%	72,349	100%

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